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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/517,521 | 01/09/2006 | Jun Hirano | L9289.04191 | 7130 |
| 52989 | 7590 | 09/01/2010 | | |
| Dickinson Wright PLLC James E. Ledbetter, Esq. International Square 1875 Eye Street, N.W., Suite 1200 Washington, DC 20006 | | | EXAMINER ANWAR, MOHAMMAD S | |
| | | | ART UNIT 2463 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,521

Applicant(s)

HIRANO ET AL.

Examiner

MOHAMMAD ANWAR

Art Unit

2463

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24, 26, 28, 29, 32 and 35-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24, 26, 28, 29, 32, 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/17/10 have been fully considered but they are not persuasive. Please see response below:

In response to applicant argument, It is submitted that Kohno does not disclose an intermittent communication mode in the sense of the instant claims, wherein the intermittent communication mode includes a predetermined sleeping period and a predetermined active period relating to a data transmitting terminal, instead, Kohno discloses a "standby mode" wherein the receiving terminal goes into "standby" to await receipt of a data packet, when it is waiting for a retransmitted packet as described in Fig. 14, steps S419 and S 420. Thus, it is apparent that the "standby mode" of Kohno is very different from the "predetermined sleeping period" of the intermittent communication mode relating to a data transmitting terminal of the present claimed invention. Accordingly, it is submitted that Kohno does not cure the deficiencies of Shohara because Kohno fails to teach or suggest the technical feature of "in response to receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus in an automatic repeat request mode, performing a retransmission of the data and securing an ACK/NACK frame, for the retransmission of the data, within the predetermined sleeping period of the intermittent communication mode." (see newly cited reference Morelli et al.).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 24, 26 and 28, 29, 32, 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shohara et al. (U.S. Patent No. 6,804,503 B2) in view of Morelli et al. (U.S. Patent No. 6,236,674 B1).

For claims 24 and 38, Shohara et al. disclose receiving from a communication terminal accommodation apparatus, a signal to allow the communication terminal to enter an intermittent communication mode (see column 7 lines 21-23, mode control logic) including a pre-determined sleeping period and a predetermined active period (see column 7 lines 21-23, specified event time for active mode and sleep mode); after receiving the signal to allow intermittent communication mode, transmitting data during the predetermined active period of the intermittent communications mode(see column 10 lines 40-42, column 11 lines 39-57, column 15 lines 46-48, where a scheduler schedules the time of events and sleep mode and switching back and forth). Shohara et al. disclose all the subject matter but fails to mention in response to receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus in an automatic repeat request mode, performing a retransmission of the data and securing an ACK/NACK frame for said retransmission of the data within the pre-determined sleeping period of the intermittent communication mode. However, Morelli et al. from a similar field of endeavor disclose upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus, performing a retransmission of the data communication using the pre-determined sleeping period of the intermittent communication (see column 4 lines 10-24, a power-up transmitter in sleep mode to retransmit packets if the packets requires response). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Morelli et al. retransmission scheme into Shohara et al. intermittent transmission

scheme. The method can be implemented in a transmitter. The motivation of doing this is to increase response time (see column 4 line 19).

For Claims 26 and 39, Shohara et al. disclose a radio reception section that receives a signal to allow intermittent communication, from a communication terminal accommodation apparatus (see Figure 1, 26, intermittent communication device), the intermittent communication including a pre-determined sleeping period and a pre-determined active period (see column 7 lines 21-23, specified event time for active mode and sleep mode); a control section that enters an intermittent communication mode upon receiving the signal (see column 7 lines 8--11); and a radio communication section that performs data communication using the active period of the intermittent communication (see column 11 lines 38-43, column 7 lines 8-11, active or sleep mode at specified event times). Shohara et al. disclose all the subject matter but fails to mention wherein the radio communication section, upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus, performs a retransmission of the data communication using the predetermined sleeping period of the intermittent communication. However, Morelli et al. from a similar field of endeavor disclose wherein the radio communication section, upon receiving a negative acknowledgment (NACK) signal from the communication terminal accommodation apparatus, performs a retransmission of the data communication using the predetermined sleeping period of the intermittent communication (see column 4 lines 10-16, control signal is NACK). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Morelli et al. retransmission

scheme into Shohara et al. intermittent transmission scheme. The method can be implemented in a transmitter. The motivation of doing this is to increase response time (see column 4 line 19).

For claims 28 and 40, Shohara et al. disclose the communication terminal apparatus comprises: a radio reception section that receives the signal to allow intermittent communication, from the communication terminal accommodation apparatus (see Figure 1), a control section that enters an intermittent communication mode upon receiving the signal(see column 7 lines 5-12); and a radio communication section that performs data communication using the predetermined active period of the intermittent communication (see column 7 lines 10-11, specified event times). Shohara et al. disclose all the subject matter but fails to mention a transmission section that transmits a signal to allow intermittent communication and a negative acknowledgment (NACK) signal; the radio communication section, upon receiving the negative acknowledgment (NACK) signal, the intermittent communication including a predetermined sleeping period and a predetermined active period. However, Morelli et al. from a similar field of endeavor disclose a transmission section that transmits a signal to allow intermittent communication and a negative acknowledgment (NACK) signal (see Figure 1, 12, a transmitter circuitry); the radio communication section, upon receiving the negative acknowledgment (NACK) signal (see column 4 line 11-12, control signal or NACK) Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Morelli et al. retransmission scheme into Shohara et al. intermittent transmission scheme. The method can be implemented in a

transmitter. The motivation of doing this is to increase response time (see column 4 line 19).

For claims 29, 32, 35, 36 and 37, Shohara et al. disclose wherein the predetermined active period is a frame to perform the data communication (see column 11 lines 52-54).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MOHAMMAD ANWAR** whose telephone number is

(571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MOHAMMAD ANWAR
Examiner
Art Unit 2463

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Examiner, Art Unit 2463

/Derrick W Ferris/
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